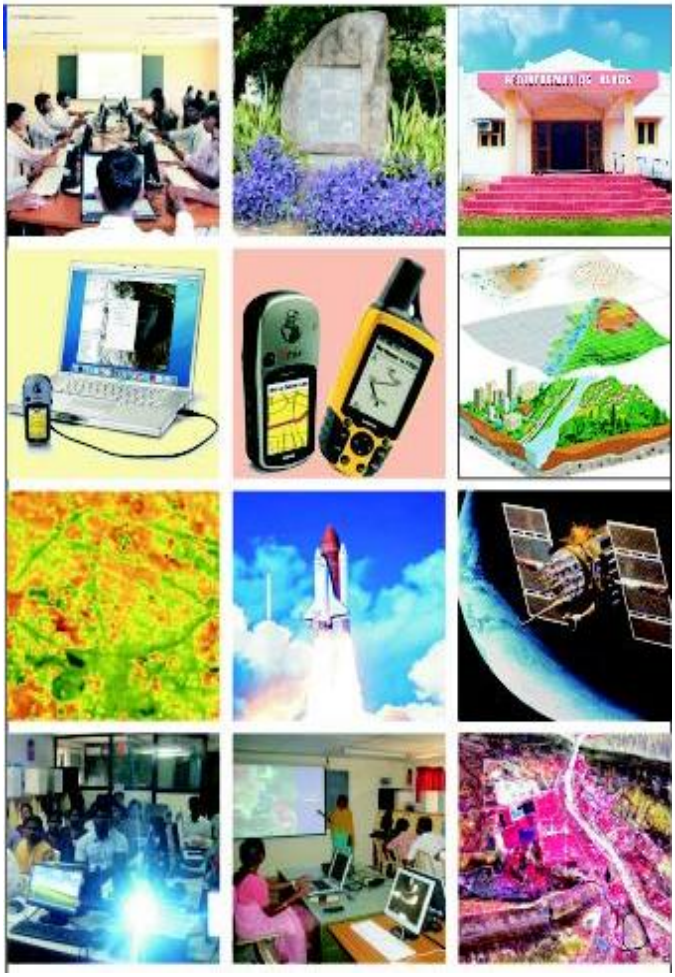

CENTRE FOR GEOINFORMATICS

INFORMATION BROCHURE

The Gandhigram Rural Institute
Deemed University
Re-accredited by NAAC with A Grade
Gandhigram — 824 302

The University

The Gandhigram Rural Institute (GRI) was founded in 1956 by two disciples of Gandhiji, Dr.G.Ramachandran and Dr.T.S.Soundaram. The University Grants Commission (UGC), New Delhi, conferred on it the status of a Deemed University (GRI) in 1976. The National Assessment and Accreditation Council (NAAC), Bangalore, has re-accredited the Institute with 'A' Grade status in 2010. The Institute offers Doctoral, Master's and Bachelor's Degree, Diploma and Certificate programmes. The academic programmes of the Institute have attracted students from different parts of India and from other developing countries.

The Institute is situated on a two hundred acre campus in a verdant valley wedged between the Western Ghats and the Sirumalai Hills. It currently houses 7 faculties, 23 Departments and 21 Extension Outfits implementing 9 variegated campus programmes and 40 Distance Learning/ People's Education Programmes. Lying 55 kms. north of Madurai city, Gandhigram is easily accessible by rail and road. The nearest Railway Station is Ambathurai and the nearest Airport in Madurai.

The Centre for Geoinformatics offers a two-year, four semester M.Sc. programme in Geoinformatics as well as a one-year, two-semester PG Diploma programme in Spatial Technologies, with the aim of developing human resources in Geoinformatics for the emerging, high-tech enterprise scenario in India.

Eligibility

- Graduates of Earth and Life sciences.
- Any graduate who has studied Mathematics/ Statistics/ Business Mathematics/ Computer Applications as one of the subject at +2 level or graduate level.

Those who are awaiting final semester results can also apply. Admission to the programme is based purely on merit, i.e., on the basis of marks scored in an entrance test.

Admission Procedure

Students seeking admission to the programmes have to apply in the prescribed form issued every year during May/June. GRI releases an advertisement in leading national and regional dailies with details of the application fee and the last date for submission of filled in application form. These details can also be accessed from the Institute's Website, www.ruraluniv.ac.in

M.Sc. in Geoinformatics

The courses of the programme are designed to provide adequate theoretical and practical knowledge about Geoinformatics and its applications. The programme is specially designed for students who aspire for lucrative jobs as well as avenues of research/ advanced studies. The programme is offered on self - financing basis.

Objectives of the Programme

The objectives are to

- impart knowledge in digital cartography, Geographic Information System (GIS), remote sensing, watershed development, DBMS, C++, OOPS, Visual Computing, Web Technology, Global Positioning System (GPS)
- train students in the use of software in Computer Cartography, GIS, GPS and Remote Sensing.

Programme Design and Curriculum

This multi-disciplinary programme offers students the opportunity to use a computer constantly, enabling them to master the latest software packages available in the fields of GIS, Digital Image Processing, GPS and Computer Science. The aim is to make the students master in both theory and practice. The curriculum includes comprehensive and state-of-the-art courses in Geoinformatics.

Theory courses	Introduction to Geoinformatics Principles of Cartography IT for Geoinformatics Fundamentals of GIS Introduction to Rural Development Basics of Remote Sensing Object Oriented Programming and C++ Digital Image Processing for Geoinformatics Relational Database Management System GIS Modeling and Applications Research Methodology for Geoinformatics GPS and its Applications
Practical Courses	Cartography Digital Image Processing GIS GPS Case Study in GIS / Remote Sensing / Web GIS Visual Computing
Electives	Java Programming Computer Graphics Watershed Management Web Technology for Geoinformatics
Internship	
Dissertation	

Case Study

During the third semester, the students are required to do a Case Study in GIS, Image Processing or GPS in order to enable them to gain intensive practical knowledge. In addition, the students are required to do small projects in practical applications as part of the practical courses. They are encouraged to make presentations of seminar papers as part of theory courses. All this enables the students to realize their full potential.

Dissertation

This programme has a dissertation component also. In this component, the students are required to select a suitable research topic in any field of Geoinformatics and submit a dissertation. The department guides them in finding suitable topics and institutions for their dissertation work. During the final semester they have to undergo internship in Geoinformatics Companies/ Institutions. This helps the students to learn the latest trends in the field of Geoinformatics.

PG Diploma in Spatial Technologies

The courses of this programme are aimed at training students in the use of Spatial Technologies. The programme provides students practical training and field knowledge so as to give them sufficient industry orientation and practical skills. The programme is specifically designed for students who aspire to land lucrative jobs in a short period.

Objectives of the Programme

The objectives of the programme are to:

- impart knowledge in Digital Cartography, GIS, Remote Sensing
- train students in the use of software packages in Digital Cartography, GIS, and Remote Sensing.

Programme Design and Curriculum

This multi-disciplinary programme is so designed that the students will have an opportunity to use a computer constantly, enabling them to master the latest software packages available in the field of Spatial Technologies. The programme is handled by a qualified team of dedicated faculty with all state-of-the-art facilities for achieving excellence in the subject. The curriculum is comprehensive and extensive. The practical classes include off-campus industry orientation programmes besides laboratory exercises and research sessions.

Theory Courses	Introduction to Spatial Technologies
	Principles of Cartography
	IT for Spatial Technologies
	GIS
	Micro Level Planning
	Basics of Remote Sensing & Digital Image Processing
	GPS and its Applications
Practical Courses	Digital Image Processing
	GIS
	Project work
Electives	Watershed Management

Project Work

During the second semester the students are required to do a project in any one of the fields of Spatial Technologies and submit a report. The Department helps in the selection of the topic of the project.

Infrastructure Facilities

The department has a laboratory adequately equipped with the hardware and the latest software required for the effective teaching and practice of these emerging technologies.

Software available in the laboratory

GIS -Arc GIS**,** IDRISI

Digital Image Processing

-ERDAS Imagine

-Leica Photogrammetry Suite

GPS Software - Map Source

Programming Language

-TURBO C++

-VB Script

-Visual Basic 6.0

-VB.net

-Cold fusion 6.0

-JAVA Script

-ORACLE 8i

-HTML

-Python

Internet Facility

The Institute has an Internet Browsing Centre with 10 mbps bandwidth through OFC from BSNL and Railtel.

Library

The Institute Library has a rich collection of reference books, back volumes, research periodicals, journals, magazines and project reports. It has INFLIBNET (INFormation LIBrary NETwork) connectivity with 10 mbps, which enables the student to access thousands of e-journals. In addition, the department library has a good collection of books on Cartography, Remote Sensing, GIS, GPS, Computer Science, and Information Technology.

Other Facilities

Separate hostels with adequate facilities are available for boys and girls. Cell for Culture and Art, Media Center, Yoga Center, Gym, Health Centre etc., are also available.

Employment Potential

Students trained in the use of various software packages related to Geoinformatics are placed in government organisations and private companies even before the completion of their academic programme.

Placement Details

The department has an exclusive placement cell for the benefit of the students. It arranges campus interviews / recruitment for the students of M.Sc Geoinformatics and PG Diploma in Spatial Technologies. The alumni of these programmes are employed in the following organizations:

Hyderabad

- Remote Sensing Instruments
- NIRD

Bangalore

- Yahoo
- Magnasoft
- Kavin Care
- EGIS
- HCL Software Ltd
- Navayuga Systems
- SECON Private Ltd
- SKY Group
- Lotus
- Genesys International Corporation Ltd

Chennai

- TTK Maps
- Info maps
- GISBIZ
- NOKIA Maps
- Larson & Tubro
- Geofiny Technology
- EDR Conduce Pvt. Ltd.
- Institute of Water Studies
- Institute of Remote Sensing
- National Informatics Centre
- Edgemap software Pvt. Ltd
- Empower Consultancy Pvt. Ltd
- Apex knowledge Technology Pvt. Ltd.
- Wipro
- Infinium Pvt Ltd.
- Prime Meridian Pvt Ltd
- Mape Solutions Pvt Ltd.

- Mailsoft Solution Pvt Ltd.
- CTS

Pune
- Cyber Tech

Chhattishgarh
- NIC

Mumbai
- Rolta India

Cochin
- Paradigm IT Pvt Ltd

Gurgaon
- SGS Infotech Pvt. Ltd

Kharagpur
- Regional Remote Sensing Service Centre

Trichy
- DSM Soft

Coimbatore
- Robert Bosch
- Redleaf Technology Pvt. Ltd.
- Geoedge Technologies Pvt. Ltd

Kancheepuram
- Hand in Hand India

Address for Communication

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